



E-governance Issues and Barriers in Solution Implementation

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Abstract— *E-Governance now-a-days has been proving itself as very grateful means in public as well as private sector in most of the developed and developing countries. E-governance is the effective use of Information & Communication Technology (ICT) to improve the system of governance that is in place, and thus provide better services to the Citizens. E-Governance is considered as a high priority agenda in India, as it is considered to be the only means of taking IT to the “Common Public”. Even though there is an issue of proper infrastructure required for the deployment of the E-Governance in some regions; it can be very beneficial for the government to reduce the cost of governance in most possible areas. This paper focuses on E-Governance in India and its success ability.*

Keywords— *E-governance, ICT, E-literacy, IT infrastructure, security awareness*

I. INTRODUCTION

E-governance simply means the application of information & communication technologies(ICT) to transform the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges with in government, between govt. & govt. agencies of National, State, Municipal & Local levels, citizen & businesses, and to empower citizens through access & use of information.[3] Since India is a developing nation, there is a lack of proper technological as well as human infrastructure.[2] If we could solve these issues e-governance will become a way to solve the social as well as economic problems.[1]

The basic idea is to publish Government Portal which will allow the citizen to directly interact with the government. Also the Government can reach the end citizen through Internet quickly. It will also reduce the cost of deploying the services.

II. LITERATURE SURVEY

The E-Gov emerged in the late 1990's. [8] Over the past few years E-Gov gave rise to several conferences with more scientific content. Because the field grew too considerable size, both its contents and position with respect to other research fields and disciplines needs to be explained and discussed. A huge number of E-Gov projects are undertaken in most countries around the globe including India. Many attempts are made to assess E-Gov development based on these projects. [4] It is said by Audit Office of New South Wales, Australia (2001) that E-government is about improving the efficiency and effectiveness of government by using the Internet and related technologies. [8]

A. Following are some E-Gov Projects in India

- Bhoomi – Automation of Land Records (State Government of Karnataka). It provides computerized Record of Rights Tenancy & Crops (RTC) needed by farmer to obtain bank loans, settle land disputes etc. It has also ensured increased transparency and reliability, significant reduction in corruption, exploitation and oppression of farmers. This project has benefited 20 million rural land records covering 6.7 million farmers.

Benefits: Kiosks (Bhoomi Centre) provide RTC online at a very nominal cost of Rs. 15/- only. Efficiency for getting records of right is very high; it will just take only 5 to 30 min. whereas old system will take around 3 to 30 days. Mutation will takes place within 35 days whereas in old manual system it will take minimum of 200 days. Land record distribution is very high (Nearly 14 million records). Number of mutation per year is 1.6 million which is very high in comparison to old system. [4]

- CARD– Registration Project (State Government of Andhra Pradesh) Computer-Aided Administration of Registration Department (CARD) impacting 10 million citizens over a period of 3 years. It has completed registration of 2.8 million titles with title searches made in 1.4 million cases. The system ensures transparency in valuation of property and efficient document management system. The estimated saving of 70 million man-hours of citizen time valued at US\$ 35 mil (investment in CARD - US\$ 6million). Similar initiatives in other states like SARITA (State Government of Maharashtra) STAR (State Government of Tamil Nadu), etc. have further built upon this initiative. CARD was one of the ten finalists in the International Innovation awards program instituted by the Commonwealth Association for Public Administration and Management.

Benefits: Within short span of three years, nearly 90% of registration transactions performed electronically in Andhra Pradesh. [5]

- Gyandoot- Intranet in Tribal District of Dhar (State Government of Madhya Pradesh) This project offers e-governance services including online registration of applications, rural e-mail facility, village auction site etc. It also provides services such as Information on Mandi (farm products market) rates, On-line public grievance redressal, caste & income certificates and Rural Market (Gaonka Bazaar). It was winner of Stockholm challenge IT Award 2000.

Benefits: Farmers will be facilitated by the Gyandoot by providing the appropriate price for their crop which minimizes the role of mediators, fast and easy access of various types of forms, land records etc. Villagers can participate in the decision making of various functioning bodies for their welfare by effective grievance redressal. [6]

- Vahan&Sarathi- Vehicle registration, permit driving license project (State Government of Tamil Nadu) The software developed by National Informatics Centre (NIC) for use at Regional Transport Offices is a workflow system to carry out the activities using Computers. Vahan is for processing all transactions related to Vehicles and Sarathi is for processing Driving License and related activities. Vahan can be used to issue Registration Certificate, Fitness certificate and Permits. Sarathi can be used to issue a Learner's License, Permanent Driving License and Conductor License to the applicant. The system was implemented on pilot basis in RTO Chennai (North).

Benefits: Online availability of complete vehicle information. Monitors selling and purchasing of vehicle, Transfer of vehicle, address modification etc becomes very fast and easy. [7]

B. Fields where e-governance can be implemented:

- CITIZEN CERTIFICATION
- FINANCE
- FOOD AND RATIONING
- HEALTH AND MEDICAL FACILITY
- EDUCATION
- EMPLOYMENT
- DEFENCE
- LAW
- AGRICULTURE
- LAND MEASUREMENT
- TRANSPORT
- PRODUCTION AND MARKETING

III. E-GOVERNANCE: ISSUES IN INDIA

A. Social mindset to accept the system

Major problem in deployment of E-Gov is technological illiteracy. People are not mentally ready to accept sudden changes regarding traditional Governance. Also the cost of internet access is too high for poor citizens. One more problem is with the design issues of the government portals through which the actual deployment of E-Gov will take place. [1]

B. Technological background

Lack of necessary infrastructure like electricity, internet, technology and ways of communications will affect the speed which delays the implementation. [2] Available internet bandwidth of the service providers is not much sufficient to access heavy web load.

C. Security issues

This is one of the most sensitive issue immersed due to again lack of proper knowledge and awareness. There is a possibility of confidentiality loss by social Engineering, inability to use biometric authentication, inability in maintaining passwords. [2]

IV. SOLUTIONS FOR THE ISSUES

For e-governance to succeed in India 'e-readiness' must be built. This means strengthening infrastructural inadequacies, reducing the barriers to e-governance, and strengthening the drivers to E-Governance.

A. Building of tech-friendly atmosphere in citizen

Government is already coming forward for creating awareness in the servants who are actually going to take part in the deployment of E-Gov scheme and for citizen for whom the scheme are to be deployed. [2]The different strategies used are:

1. E-Govschool for involved citizens
2. Development of websites like www.mahaonline.gov.in

B. Building Legislative Infrastructure for e-Governance

The success of E-Gov will be too much depending on building of legislative changes including digital signature; data protection; cyber-crime etc. The Government of India has already introduced the IT Act and Convergence Bill. [2] In

addition to awareness commitment-raising activities for top-level leaders, there is also a need to train others who will take a leading role.

C. Creating highly secure web portals and proper awareness regarding security

For accessing the web portals for governmental services some secure authentication and authorization strategies must be implemented. For the success of these strategies proper awareness should also be created. Some encryption-decryption algorithms must be implemented to avoid any kind of attacks on sensitive data; e.g. two way authentication, SHA for client server communication, etc. [3]

V. SITE SPECIFIC BARRIERS IN IMPLEMENTATION OF THE SOLUTION

A. Difficulties in training uneducated people

Training for old, uneducated and physically disabled people is quite challenging. Since it is not possible to express all technical jargons in local languages, it is not easy to make everyone understand it.

B. Availability of resources for infrastructure like electricity

In India there are some resource related issues like

- a) 24*7 availability of electricity to use machines.
- b) Cost of hardware required is more
- c) Availability of communication link in rural areas

C. Unawareness of keeping security in citizen

Citizens either unaware to follow security restrictions or they avoid to follow it.

Examples-

- a) Sharing of confidential data such as passwords.
- b) Keeping easily guessable passwords.
- c) Writing down passwords on papers.
- d) Avoid having password recovery policies.

VI. CONCLUSIONS

E-governance in India is moving towards success with the help of some ongoing projects. There are some issues in implementation. Also solutions for these issues have been suggested. Even after having solutions still there are some site specific barriers to completely overcome these issues. The basic barrier of acceptance occurs due to illiteracy in people. For the success of E-Governance a well balanced approach by the Government is required. Once we succeed to cover up these barriers ultimate success of e-governance is possible.

REFERENCES

- [1] "E-governance in India - problems and acceptability" by Dr. Sanjay Kumar Dwivedi, Ajay Kumar Bharti
- [2] Sameer Sachdeva 2002 "E-Governance Strategy in India"
- [3] Ministry of Information Technology (MIT)2001 "E-Governance - A Concept Paper"
- [4] Automation of Land Records State Government of Karnataka[<http://www.revdept-01.kar.nic.in/>]
- [5] Registration Project State Government of Andhra Pradesh, 1996,[<http://igrs.ap.gov.in/>]
- [6] Intranet in Tribal District of Dhar State Government of Madhya Pradesh[<http://www.gyandoot.nic.in/>]
- [7] E-Governance at Regional Transport Offices in Tamil Nadu, 2007, National Informatics Centre Tamil Nadu State Centre[<http://www.tn.nic.in/tnc/home/projectfiles/brochure-transport.pdf>]
- [8] "Towards Excellence in E-Governance" by K.B.C. Saxena, Management Development Institute, Gurgaon[April 4, 2005]